

AMENDMENTS TO THE CLAIMS:

The present Amendment has been prepared in accordance with a revised format established by the U.S. Patent and Trademark Office, as permitted in the Pre-OG Notice entitled "Amendments in a Revised Format Now Permitted."

Please amend Claims 1-31 as follows. In accordance with the Revised Amendment Format, the status of all claims is identified below.

1. (Currently Amended) ~~An electron source forming substrate where an A~~
substrate structure which is a precursor to an electron source, and on which an electron-
emitting device of the electron source is ~~arranged to be disposed~~, comprising:

a substrate; and

an insulating material film ~~which is disposed on a surface of provided on~~
said substrate, ~~at which surface said electron-emitting device of said substrate is arranged,~~
and ~~which contains~~

wherein said insulating material film comprises a plurality of metallic oxide
particles having an average particle size within ~~the a~~ range of 6 nm to 60 nm as expressed
in a median value.

2. (Currently Amended) The ~~electron source forming~~ substrate structure
according to claim 1, wherein said insulating material film further ~~contains~~ comprises
phosphorus.

3. (Currently Amended) The ~~electron source forming~~ substrate structure

according to claim 1, wherein said insulating material film ~~contains~~ comprises phosphorus in 1 weight portion to 10 weight portions.

4. (Currently Amended) The ~~electron source-forming~~ substrate structure according to any one of claims 1 to 3, wherein a thickness of said insulating material film is within ~~the~~ a range of 200 nm to 600 nm.

5. (Currently Amended) The ~~electron source-forming~~ substrate structure according to any one of claims 1 to 3, wherein ~~the~~ a thickness of said insulating material film is within ~~the~~ a range of 300 nm to 400 nm.

6. (Currently Amended) The ~~electron source-forming~~ substrate structure according to any one of claims 1 to 3, wherein on said insulating material film, a film comprising an insulating material is further laminated.

7. (Currently Amended) The ~~electron source-forming~~ substrate structure according to claim 6, wherein ~~the~~ a thickness of the film comprising ~~said~~ the insulating material is within ~~the~~ a range of 20 nm to 150 nm.

8. (Currently Amended) The ~~electron source-forming~~ substrate structure according to claim 6, wherein ~~the~~ a thickness of the film comprising said insulating material is within ~~the~~ a range of 40 nm to 100 nm.

9. (Currently Amended) ~~An electron source forming~~ A substrate structure which is a precursor to an electron source, and on which ~~where~~ an electron-emitting device of the electron source is ~~arranged to be disposed~~, comprising:

a substrate; and

an SiO₂ film ~~which is disposed on the surface where said electron-emitting device of said substrate is arranged, and which contains~~ provided on said substrate,

wherein said SiO₂ film comprises a plurality of metallic oxide particles having an average particle size within ~~the~~ a range of 6 nm to 60 nm as expressed in ~~the~~ a median value.

10. (Currently Amended) The ~~electron source forming~~ substrate structure according to claim 9, wherein said SiO₂ film further ~~contains~~ comprises phosphorus.

11. (Currently Amended) The ~~electron source forming~~ substrate structure according to claim 9, wherein said SiO₂ film further ~~contains~~ comprises phosphorus in 1 weight portion to 10 weight portions.

12. (Currently Amended) The ~~electron source forming~~ substrate structure according to claim 9, wherein ~~the~~ a thickness of said SiO₂ film is within ~~the~~ a range of 200 nm to 600 nm.

13. (Currently Amended) The ~~electron source forming~~ substrate structure according to claim 9, wherein ~~the~~ a thickness of said SiO₂ film is within ~~the~~ a range of 300

nm to 400 nm.

14. (Currently Amended) The ~~electron source forming~~ substrate structure according to claim 9, wherein on said SiO₂ film a film comprising an SiO₂ film is further laminated.

15. (Currently Amended) The ~~electron source forming~~ substrate structure according to claim 14, wherein ~~the~~ a thickness of the film comprising said SiO₂ film is within ~~the~~ a range of 20 nm to 150 nm.

16. (Currently Amended) The ~~electron source forming~~ substrate structure according to claim 14, wherein ~~the~~ a thickness of the film comprising said SiO₂ film is within ~~the~~ a range of 40 nm to 100 nm.

17. (Currently Amended) The ~~electron source forming~~ substrate structure according to claim 1 or 9, wherein the average particle size as expressed in ~~said~~ the median value is within ~~the~~ a range of 15 nm to 30 nm.

18. (Currently Amended) The ~~electron source forming~~ substrate structure according to claim 1 or 9, wherein ~~said~~ the metallic ~~oxides~~ oxide particles are electron conduction oxide particles.

19. (Currently Amended) The ~~electron source forming~~ substrate structure

according to claim 1 or 9, wherein ~~said the~~ metallic oxide particles are metallic oxide particles chosen from at least one of the oxides of Fe, Ni, Cu, Pd, Ir, In, Sn, Sb and Re.

20. (Currently Amended) The ~~electron source forming~~ substrate structure according to claim 1 or 9, wherein ~~said the~~ metallic ~~oxides~~ oxide particles are particles of SnO₂.

21. (Currently Amended) The ~~electron source forming~~ substrate structure according to claim 1 or 9, wherein said substrate is a substrate comprising containing sodium.

22. (Currently Amended) An electron source comprising ~~the a~~ substrate structure and ~~an~~ at least one electron-emitting device arranged on said substrate, wherein said substrate structure is the ~~electron source forming~~ substrate structure according to claim 1 or 9.

23. (Currently Amended) The electron source according to claim 22, wherein each of said at least one electron-emitting device is an electron-emitting device comprising ~~an a~~ conductive film containing an ~~electro-emitting~~ electron-emitting portion.

24. (Currently Amended) The electron source according to claim 22, wherein said at least one electron-emitting device is a plurality of ~~said~~ electron-emitting devices that are matrix-wired by a plurality of row-directional wirings and a plurality of

column directional wirings.

25. (Currently Amended) The electron source according to claim 22, wherein said at least one electron-emitting device is an electron-emitting device comprising ~~an~~ a conductive film ~~containing the~~ comprising an electron-emitting portion between one pair of electrodes.

26. (Currently Amended) The electron source according to claim 25, wherein the at least one electron-emitting device is a plurality of ~~said~~ electron-emitting devices that are matrix-wired by a plurality of row-directional wirings and a plurality of column directional wirings, wherein said one pair of electrodes are composed of ~~the~~ a material comprising platinum as ~~the~~ a principal component and wherein said wirings are composed of ~~the~~ a material comprising silver as ~~the~~ a principal component.

27. (Currently Amended) An image display apparatus comprising an envelope, ~~an~~ at least one electron-emitting device disposed in said envelope on a substrate structure, and an image display member for displaying images by irradiation of ~~the~~ at least one electron from said at least one electron-emitting device ~~devices~~, wherein the substrate ~~where said electron-emitting device is arranged~~ structure is the ~~electron source forming~~ substrate structure according to claim 1 or 9.

28. (Currently Amended) The image display apparatus according to claim 27, wherein said at least one electron-emitting device is an electron-emitting device

comprising ~~an~~ a conductive film ~~containing the~~ comprising an electron-emitting portion.

29. (Currently Amended) The image display apparatus according to claim 27, wherein said at least one electron-emitting device is a plurality of ~~said~~ electron-emitting devices that are matrix-wired by a plurality of row-directional wirings and a plurality of column directional wirings.

30. (Currently Amended) The image display apparatus according to claim 27, wherein each of said electron-emitting ~~device~~ devices is an electron-emitting device comprising a conductive film ~~containing the electro-emitting~~ comprising an electron-emitting portion between one pair of electrodes.

31. (Currently Amended) The image display apparatus according to claim 30, wherein the at least one electron-emitting device is a plurality of ~~said~~ electron-emitting devices that are matrix-wired by a plurality of row-directional wirings and a plurality of column directional wirings, wherein said one pair of ~~electrode~~ electrodes are composed of ~~the~~ a material comprising platinum as ~~the~~ a principal component and wherein said wirings are composed of ~~the~~ a material comprising silver as ~~the~~ a principal component.
